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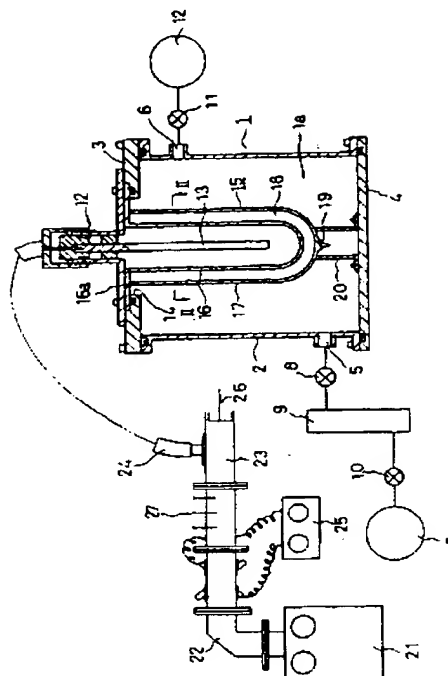
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TITLE : FLUID TREATING APPARATUS



ABSTRACT : **PURPOSE:** To sterilize easily a fluid without using chlorine or a mercury lamp as before by providing a gas-discharge chamber for discharging in a hermetic vessel with a microwave and a discharge medium, and passing a fluid while discharging electricity.

CONSTITUTION: An inner tube 16 made of quartz glass and an outer tube 17 made of synthetic quartz glass are arranged in a hermetic vessel 1 having an inlet 5 and an outlet 6 for a fluid to be treated, a gas-discharge chamber 18 is formed by both tubes, and a rod-shaped antenna 13 is provided at the center of the inside of the inner tube 16. After the gas-discharge chamber 18 is evacuated, Hg as a discharge medium and gaseous Ar for starting are sealed in the chamber 18. A microwave is sent to the rod-shaped antenna 13 from a microwave generator 21 through a waveguide 22 and a coaxial cable 24 while introducing a fluid to be sterilized such as city water from the inlet 5 to discharge electricity around the inner tube 16, and ultraviolet light is irradiated. The fluid such as city water is sterilized by said ultraviolet light, and the sterilized city water is discharged from the outlet 6.

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